

Claim Amendments:**OFFICIAL
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PATENT

Please amend the claims as follows:

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Claims 1-13 (Canceled).

14. (NEW) A wafer boat for holding a semiconductor wafer during wafer processing at elevated temperatures, the wafer boat comprising:

a first end and a second end;

a plurality of slots positioned between the first and the second ends for receiving

semiconductor wafers therein, each of the plurality of slots comprising first and second

upper support guides to maintain the semiconductor wafers in a vertical orientation; and

a lower portion upon which a portion of the wafer is in contact, and which supports the

wafer when the wafer is positioned thereon, the lower portion having a generally

concave contour as viewed along a central axis of the wafer and an arcuate

configuration which, at semiconductor processing temperatures of between

approximately 1000 °C to 1400° C, substantially conforms to the portion of the wafer

supported thereon.

15. (NEW) The wafer boat of claim 14, where the wafer boat comprises silicon carbide.

16. (NEW) The wafer boat of claim 15, wherein the silicon carbide is recrystallized silicon carbide.

17. (NEW) The wafer boat of claim 14, configured to hold at least one semiconductor wafer having a diameter of about 300 mm.

18. (NEW) The wafer boat of claim 14, wherein an angle α in the range of 10-80 degrees is defined between a first radius of the wafer extending from the center of the wafer to the periphery of the wafer proximate the first upper support guides and a second radius extending vertically downward from the center of the wafer to a point on the periphery of the wafer which corresponds to the center of the lower portion.

19. (NEW) The wafer boat of claim 18, wherein the angle α is approximately 37 degrees.

20. (NEW) The wafer boat of claim 14, wherein the plurality of slots between the first and second ends of said boat are configured to support up to 25 semiconductor wafers.

21. (NEW) The wafer boat of claim 14, wherein the wafer boat has a thickness of not less than 5 mm.

22. (NEW) A wafer boat comprising:

a first end;

a second end;

at least one slot arranged between the first end and the second end for receiving at least one wafer, the at least one slot comprising ~~a~~ first and ~~a~~ second upper support guides to maintain the at least one wafer in a substantially vertical orientation; and

a lower grooved support configured to contact a portion of the at least one wafer, the lower grooved support having an arcuate cross-section configured such that at temperatures above 1000 °C the portion of the at least one wafer is supported ^{along} by substantially all of the arcuate cross-section.

23. (NEW) A wafer boat comprising:

a first upper horizontal support guide having at least one slot configured to support at least one wafer in a substantially vertical orientation;

a second upper horizontal support guide having at least one slot configured to support the at least one wafer in a substantially vertical orientation;

a lower horizontal grooved portion coupled to the first upper support guide and coupled to the second upper support guide, the lower horizontal grooved portion ^{adapted to} contacting a portion of the at least one wafer, the cross-section of the lower horizontal grooved portion defining an arc having a length of at least 20 mm and, at semiconductor processing temperatures of greater than 1000 °C, the portion of the at least one wafer ^{will be} is supported by substantially all of the arc;

at least one window defined by the coupling between the first upper support guide and the lower horizontal grooved portion; and

at least one window defined by the coupling between the second upper horizontal support guide and the lower horizontal grooved portion.